AMENDMENTS TO THE CLAIMS

1. **(Currently amended)** A method for producing an immortalized ~~non-tumorigenic~~ human Schwann or schwannoma cell line, comprising:

a) providing a primary cell culture of human Schwann or schwannoma cells;

b) introducing a polynucleotide comprising an exogenous immortalizing gene into said cells;

c) selecting for immortalized cells that express the exogenous immortalizing gene and retain phenotypic properties of Schwann or schwannoma cells, said phenotypic properties comprising rapid growth, S100 positive, and mutant NF2 gene.

2. **(Original)** The method of claim 1, wherein the polynucleotide is a subgenomic fragment of a virus, selected from the group consisting of SV40, adenovirus, and human papilloma virus.

3. **(Original)** The method of claim 2, wherein the polynucleotide is a subgenomic fragment of a human papilloma virus, comprising the E6 and E7 genes of said human papilloma virus.

4. **(Original)** The method of claim 3, wherein the human papilloma virus is selected from the group consisting of types 16, 18, 31, 33, and 35.

5. **(Original)** The method of claim 4, wherein the human papilloma virus is type 16.

6. **(Original)** The method of claim 1, wherein the polynucleotide further comprises a viral or plasmid vector.

7. **(Original)** The method of claim 6, wherein the viral vector is selected from the group consisting of retrovirus, adenovirus, and adeno-associated virus vectors.

8. **(Original)** The method of claim 7, wherein the retrovirus vector comprises a replication-defective retrovirus construct.

9. **(Currently amended)** A substantially pure cell line of ~~non-tumorigenic~~ immortalized human Schwann or schwannoma cells, which expresses an exogenous immortalizing gene and retains phenotypic properties of Schwann or schwannoma cells, said phenotypic properties comprising rapid growth, S100 positive, and mutant NF2 gene.

10. **(Original)** The cell line of claim 9, wherein the exogenous immortalizing gene is selected from the group consisting of SV40 T antigen, adenovirus EA, and human papilloma virus E6 and E7 genes.

11. **(Original)** The cell line of claim 10, wherein the human papilloma virus is selected from the group consisting of types 16, 18, 31, 33, and 35.

12. **(Currently amended)** A substantially pure cell line of immortalized human Schwann or schwannoma cells actively expressing the E6 and E7 gene of human papilloma virus 16, wherein the immortalized cell line ~~maintains~~ has phenotypic characteristics ~~of human Schwann or schwannoma cells~~, comprising: rapid growth, S100 positive, and mutant NF2 gene.

13. **(Currently amended)** The cell line of claim 12, wherein the cell line has ~~phenotypic characteristics, comprising: rapid growth; non-tumorigenic; S100 positive; mutant NF2 gene (1575 G→A splice receptor); acceptor splice site of exon 15 same as original tumor; hypodiploid human male derivation; and~~ human papilloma virus 16 DNA integrated into cellular DNA.

14. **(Currently amended)** ~~The cell line of claim 12, having the identifying characteristics of~~ A substantially pure cell line of immortalized human Schwann or schwannoma cells actively expressing the E6 and E7 gene of human papilloma virus 16 deposited as ATCC Accession # PTA-4544.

15. **(Currently amended)** A method for determining the effect of a pharmacological agent on human Schwann or schwannoma cells, said method comprising:

a) contacting the substantially pure cell line of ~~non-tumorigenic~~ immortalized human Schwann or schwannoma cells of claim 9, with said pharmacological agent; and

b) determining the effect of said pharmacological agent on said cell line.

16. **(Original)** The method of claim 15, wherein the effect is a change in cell growth.

17. **(Original)** The method of claim 15, wherein the effect is a change in a phenotypic characteristic of the cell line.

18. **(Original)** The method of claim 17, wherein the change is an increase or decrease in expression of a cellular gene.

19. **(Original)** The method of claim 18, wherein the cellular gene expresses a gene product selected from the group consisting of: cell cycle proteins, transcription factors, signaling molecules, cytokines, growth factors, and growth factor receptors.

20. **(Original)** The method of claim 15, wherein the pharmacological agent is selected from the group consisting of chemicals, drugs, hormones, cytokines, and growth factors.

21. **(Original)** The method of claim 15, wherein said effect is selected from the group consisting of: genotoxicity, DNA adduct formation, mutagenicity, cell transformation and/or cytotoxicity, programmed cell death, chromosomal damage, de-myelination, and remyelination.

22. **(Withdrawn)** A method for screening cancer chemotherapeutic and antineoplastic activity of an agent, comprising

culturing the cell line of non-tumorigenic immortalized human Schwann or schwannoma cells of claim 9, with said agent, and

determining growth of said cell line, a lack of growth of said cell line being indicative of an antineoplastic activity of said agent.

23. **(Withdrawn)** A method for testing carcinogenicity of an agent, comprising

culturing the cell line of non-tumorigenic immortalized human Schwann or schwannoma cells of claim 9, with an agent suspected of being carcinogenic, and

determining the formation of malignant cells, said formation being indicative of carcinogenicity of said agent.

24. **(Withdrawn)** A method for screening a neuroprotective activity of an agent, comprising:

a) coculturing the cell line of non-tumorigenic immortalized human Schwann or schwannoma cells of claim 9, with neurons,

b) adding said agent to said cells, and

c) determining the level of myelination of axons of said neurons.

25. **(Withdrawn)** The method of claim 24, further comprising measuring axonal outgrowth.

26. **(Withdrawn)** A method of treatment of neurodegeneration in a patient, comprising:

a) producing an immortalized non-tumorigenic human Schwann or schwannoma cell line by the method of Claim 1, and

c) implanting said immortalized cells into the patient in need thereof at a site of said neurodegeneration.

27. **(Withdrawn)** A kit for screening a pharmacological agent on schwannoma cells, comprising the substantially pure cell line of non-tumorigenic immortalized human Schwann or schwannoma cells of claim 9, with instructions for use.